Unit Cost Management

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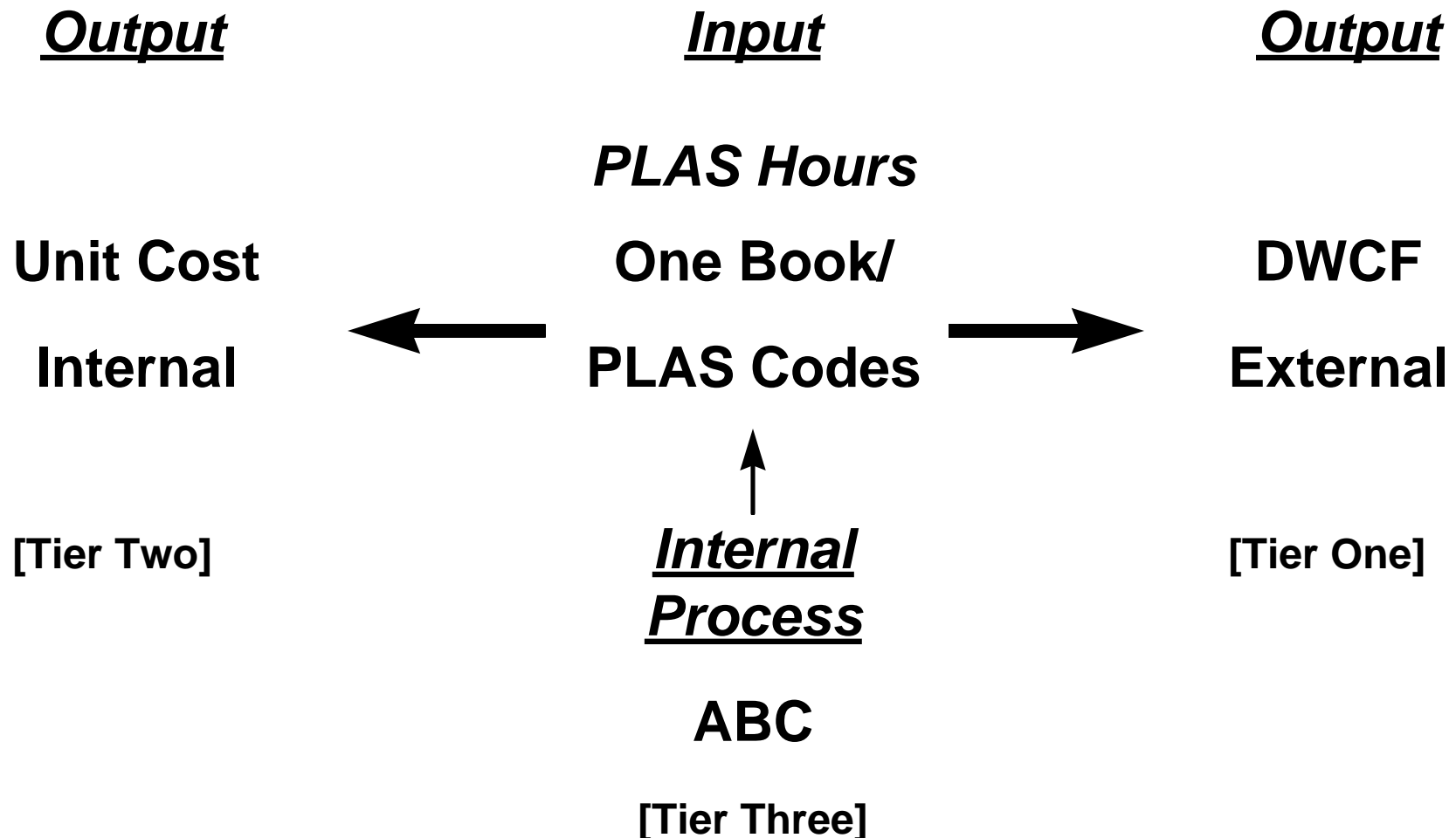# Unit Cost/DWCF Oversight & Advisory

o Tom Brunk, DCMC-AQB

o Regina Bacon, DCMC-AQBD

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Big Picture Schedule

o FY 97... Develop UCM system
     oo Review all functions for Value Added

o FY 98... Test UCM system
     oo Ensure systems and procedures support
     oo Evaluate UCM areas for Alternative Funding
       applicability
     oo Develop long range implementation plan

o FY 99... Full implementation of UCM within DCMC
     oo Testing of Alternative Funding for select
       UCM pools

Unit Cost/DWCF Hourly Data Flow

Output	*Input*	*Output*
	PLAS Hours	
Unit Cost	**One Book/**	**DWCF**
Internal ←	**PLAS Codes** →	**External**
	↑	
[Tier Two]	***Internal Process***	**[Tier One]**
	ABC	
	[Tier Three]	

Defense Working Capital Fund (DWCF) *Formerly* Defense Business Operations Fund (DBOF)

DWCF is a DoD revolving fund that provides a financial mechanism that allows DoD suppliers to "earn" budget dollars by selling services to their DoD customers.

DWCF Intentions:

o Foster business-like approach

o Identify full costs, measure cost performance, and foster efficiency & productivity improvements

o Provide information for enhanced decision making

o More closely relate support infrastructure with force structure

Direct Customer Reimbursement

o Similar to NASA, FEDCAS, and FMS work

o Primary fund source still appropriated

o Secondary fund source based on MIPRs or other
   transfer mechanisms

o Some problems in recouping total costs... more likely
   to recoup just direct labor costs and local indirect

Unit Cost Defined

Unit Cost is the total of costs relating to outputs produced, divided by the number of outputs produced

Example:

$$\frac{\text{Cost for PLAS Code \#021}}{\text{Pre-Award Surveys Completed (2.1.1.1.a)}} = \frac{\$61,842}{23} = \frac{\textit{Unit Cost}}{\$2,689}$$

Unit Cost Management

o Internal management approach to controlling cost

o Identifies customer focused outputs and collects costs associated with those outputs

o Computes a total cost per unit of output produced

o Uses cost per unit as a benchmark for measuring future cost performance

o Allows internal management to see impacts of cost cutting or performance improving initiatives on the total costs incurred/demanded by customers

o Most often used to seed DWCF rates

Activity Based Costing

o Internal management system that usually sits within
   a Unit Cost Management framework

o Allows subprocesses to be fully costed out

o Analyzes cost drivers of key internal processes

o Works at a lower level than UCM

o Can be an effective tool to show cost impacts of
   performance improvement initiatives on customer costs

o Processes analyzed don't have to be customer focused...
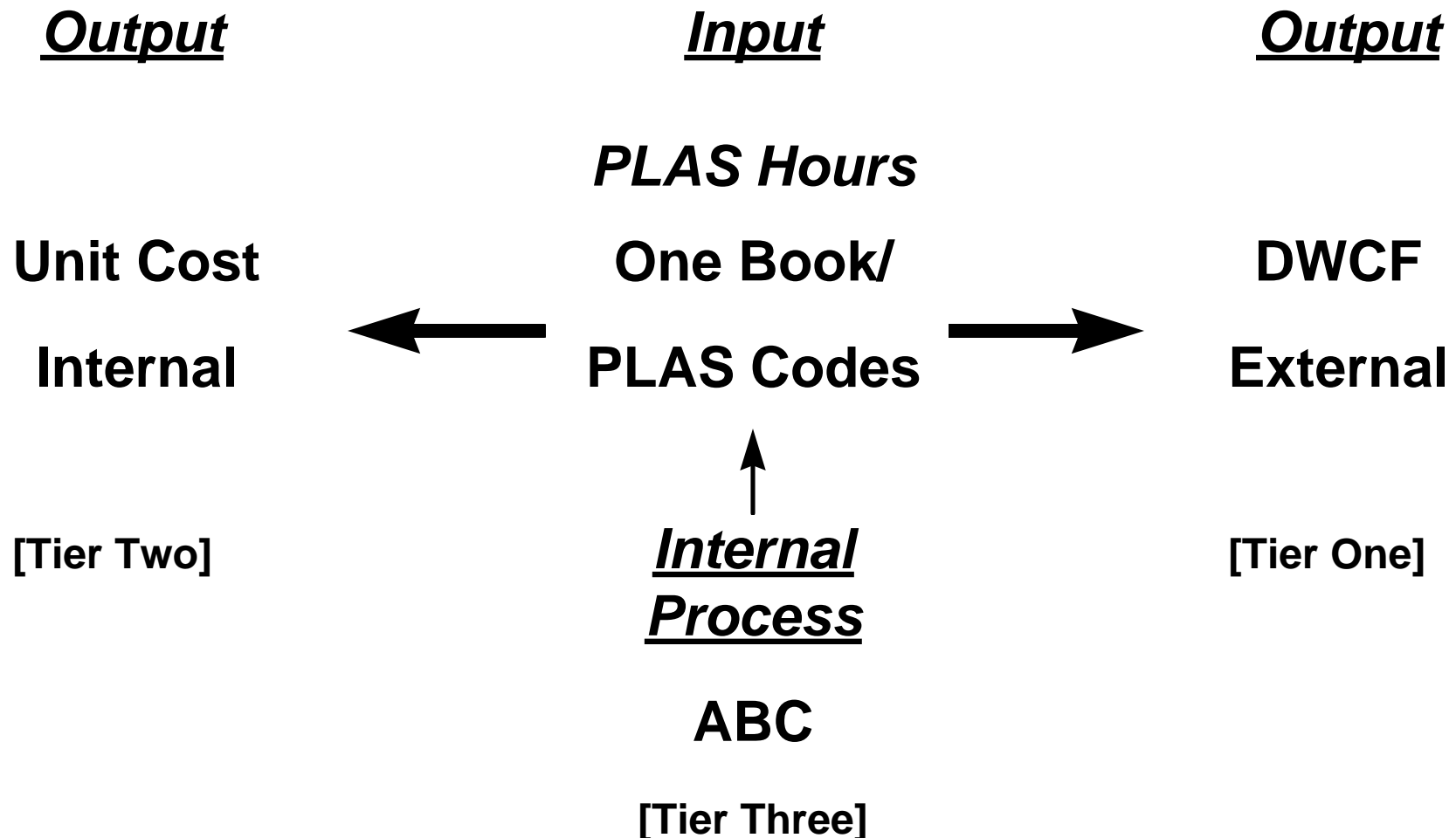   need to be centered on cost drivers within customer
   focused outputs

How Can We Structure Our Solution?

o Tiering and phasing

o Based on sound UCM and a few outputs to start...
    expand outputs on a phased schedule

o If UCM outputs are roll-ups of PLAS type data, ABC
    can be used to manage costs within UCM

o Phasing includes expanding "output" base and
    selection of appropriate fund source

o Phasing can also include identification of customers

How Can We Structure Our Solution?

o *Tier one* - External Funding Source - O&M, DWCF, Direct Reimbursable, Combination, etc.

o *Tier two* - Unit Cost Management - Internal Management approach to cost management based on customer focused outputs

o *Tier three* - ABC - Internal process directed with the goal of decreasing total costs for key outputs

Unit Cost/DWCF Hourly Data Flow

Output   *Input*   *Output*

PLAS Hours

Unit Cost   **One Book/**   **DWCF**

⟵   **Internal**   **PLAS Codes**   ⟶   **External**

↑

[Tier Two]   *Internal*   [Tier One]
Process

ABC

[Tier Three]

SIX UNIT COST
OPTIONS STUDIED

#1 - LARGE CORE BUCKET + SELECTED "C" GOAL BUCKETS

#2 - ELEVEN GROUPINGS BY SIMILAR PROCESSES

#3 - ONE BOOK LEVEL
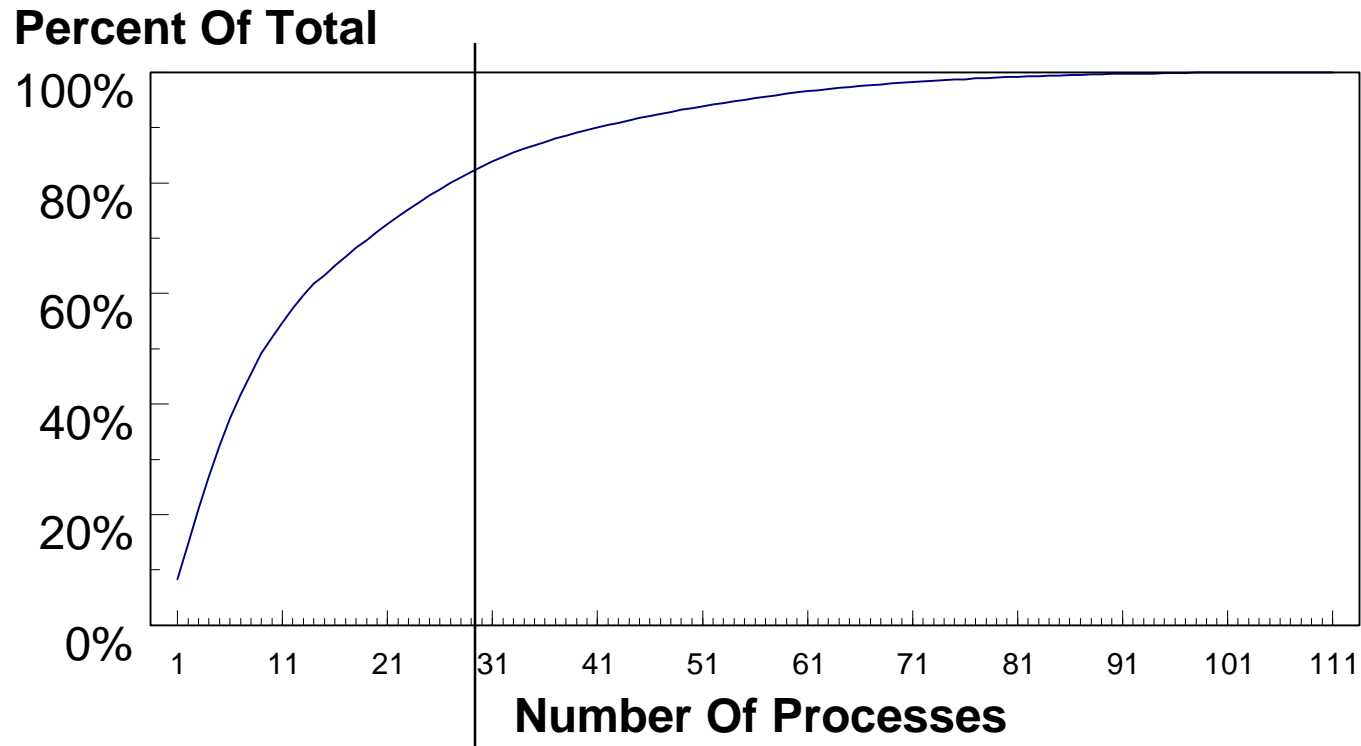
#4 - <u>DIFFERENT KINDS OF CONTRACTS</u>

#5 - SIMILAR OUTPUT PRODUCTS

#6 - GROUPING BY RIGHTS

Option 4 - Customer Focused Outputs
Initial Cost Pools

o **Basic CAS (by contract kind)**

o **Pre Award Support**

o **Mandatory Product Audits**

o **Contractor System Reviews**
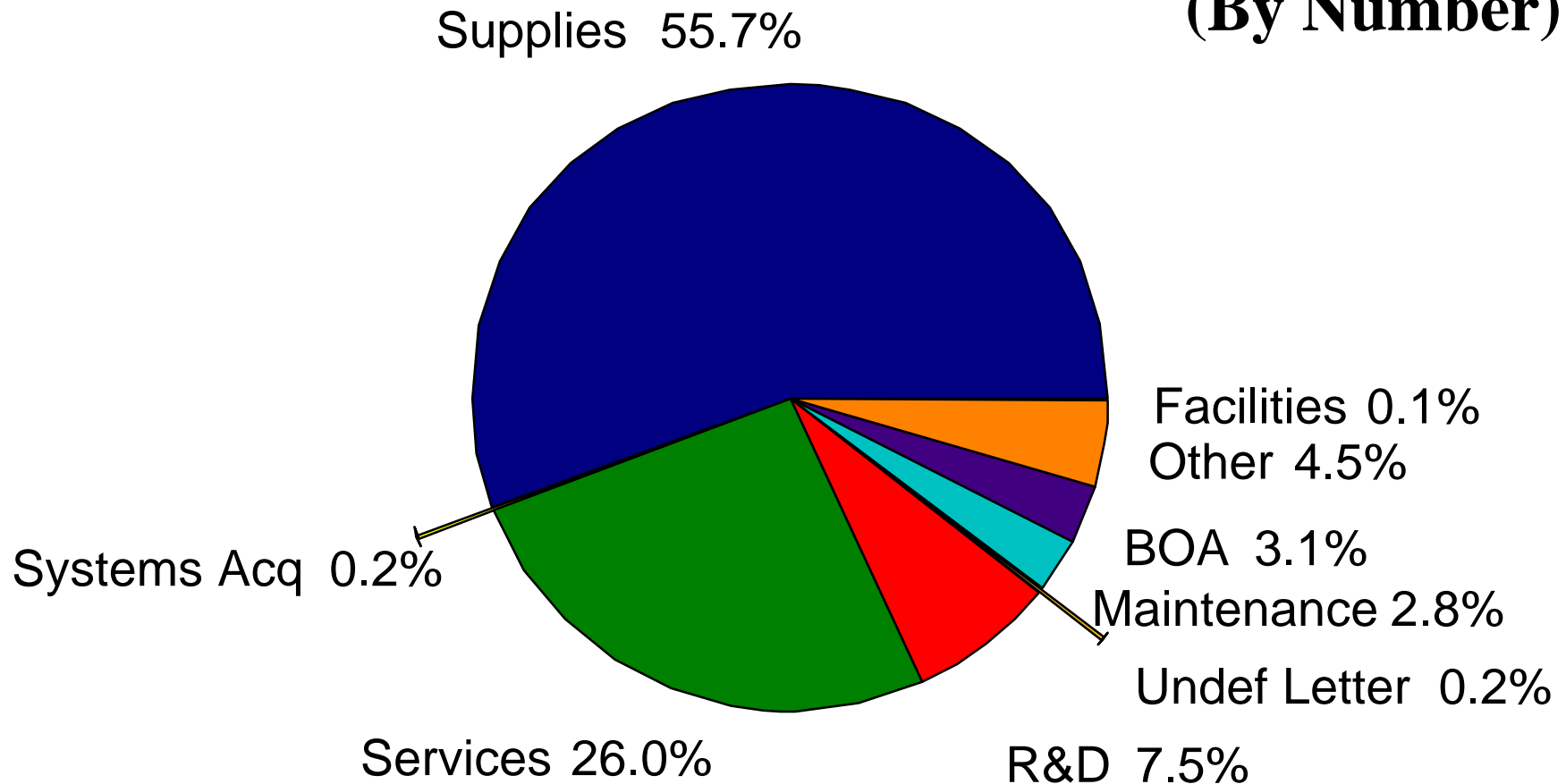
o **Other CAS (e.g., CCAS)**

o **General Management**

PARETO ANALYSIS OF ONE BOOK PROCESSES

Percent Of Total

Number Of Processes

70% OF DIRECT EXPENDITURES ARE CAPTURED BY 19 PROCESSES,
80% BY 28 PROCESSES,
90% BY 40 PROCESSES,
95% BY 56 PROCESSES, AND
99% BY 72 PROCESSES.

TOTAL DCMC "KINDS OF CONTRACTS"

(By Number)

Supplies 55.7%

Facilities 0.1%
Other 4.5%

BOA 3.1%

Systems Acq 0.2%

Maintenance 2.8%

Undef Letter 0.2%

Services 26.0%

R&D 7.5%

Note: DCMC administers 211036 supply contracts and 684 systems acquisition contracts by count.

Unit Cost Pre-Test

Purpose

o Validate concept of Option 4
- Identify PLAS processes by contract "kind"
- Determine final list for FY 98 Test

o Validate collection mechanism
- PLAS reimbursable pulldown
- Reports off-line
  -- Counts from metrics
  -- Hours from PLAS

Unit Cost Pre-Test

PLAS Reporting

...on front screen, in "Reimbursable" Column

Unit Cost Applications

o **Self-comparison**

o **Benchmarking**

o **Competition**

o **Efficiency**

o **Entrepreneurial approach**

o **Resource decisions**

Variance Analysis, Actual Reports

Volume Variance

Actual Units		Standard Units (FCAST)	x	Standard Unit Cost	=	Volume Variance
140	-	230		x $498.63	=	($44,877)

Actual Units		Standard Units (FCAST)	=	% Eff
140	/	230	=	60.9

(Core Contract Admin)

Cost Variance

Standard Cost		Actual Cost	=	Cost Variance
$114,685	-	$79,906	=	$34,779

Standard Cost		Actual Cost	=	%Eff
$114,685	/	$79,906	=	143.5

(01 Core Contract Admin)

Total Variance

Earnings		Actual Cost	=	% Eff
$69,808	-	$79,906	=	87.4

Earnings		Actual Cost	=	% Eff
$69,808	/	$79,906	=	87.4

(Core Contract Admin)

Major Unit Cost/DWCF Milestones

o **Develop Prototype**   **May 1997**

o **Pilot, Pre-test**   **May - June 1997**
      oo **East and West**
      oo **2 Area CAOs**
      oo **2 Resident CAOs**

o **DCMC-wide Test**   **Oct 1997 - Sept 1998**
      oo **Analyze and adjust**
      oo **Evaluate for DWCF**

o **Implement**   **Oct 1998**